UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

23373

7590

09/30/2009

SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 EXAMINER

CERULLO, JEREMY S

ART UNIT PAPER NUMBER

2111

DATE MAILED: 09/30/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,153	07/31/2007	Takeo Hosomi	O96021	5617

TITLE OF INVENTION: MULTIPROCESSOR SYSTEM AND METHOD FOR PROCESSING MEMORY ACCESS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

maintenance fee notifica	correspondence including defelow or directed offitions.  DENCE ADDRESS (Note: Use Bl	·	No Fe	ote: A certificate of	mailing can only be used	nt correspondence address as parate "FEE ADDRESS" for for domestic mailings of the for any other accompanying tent or formal drawing, must	
22272	7500 00/20	v2000	ha ha	ve its own certificate	e of mailing or transmission	ient of formal drawing, must	
SUITE 800	ION, PLLC LVANIA AVENUE	, N.W.	I I St ad tra	Centereby certify that the lates Postal Service was dressed to the Mainsmitted to the USP	rtificate of Mailing or Tran nis Fee(s) Transmittal is bei with sufficient postage for fi I Stop ISSUE FEE addres TO (571) 273-2885, on the	nsmission ng deposited with the United arst class mail in an envelope s above, or being facsimile date indicated below.	
WASHINGTON	N, DC 20037					(Depositor's name)	
						(Signature)	
			L			(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/586,153	07/31/2007	-	Takeo Hosomi		Q96021	5617	
TITLE OF INVENTION	R: MULTIPROCESSOR	SYSTEM AND METHO	D FOR PROCESSING M	_			
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUI	E PREV. PAID ISSU	E FEE TOTAL FEE(S) DU	E DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0 	\$1810	12/30/2009	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
CERULLO,	JEREMY S	2111	710-200000				
Tee Address" ind PTO/SB/47; Rev 03-(Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Un recordation as set forted.	ND RESIDENCE DATA less an assignee is ident th in 37 CFR 3.11. Comp	"Indication form led. Use of a Customer  A TO BE PRINTED ON ' ified below, no assignee	or agents OR, alterna (2) the name of a sin registered attorney oi 2 registered patent at listed, no name will te THE PATENT (print or t data will appear on the T a substitute for filing a	ame of a single firm (having as a member a d attorney or agent) and the names of up to red patent attorneys or agents. If no name is o name will be printed.			
4a. The following fee(s)  Issue Fee Publication Fee (N	riate assignee category or	permitted)	b. Payment of Fee(s): (Pl A check is enclosed Payment by credit c	Individual Coesse first reapply and coesse first reapply and coesses.	orporation or other private g  ny previously paid issue fe  3 is attached.	deficiency, or credit any	
5. Change in Entity Sta		d above)	overpayment, to Dep		er (enclose	an extra copy of this form).  CFR 1.27(g)(2).	
NOTE: The Issue Fee an	nd Publication Fee (if rea		d from anyone other than			the assignee or other party in	
· ·		nes rutem una rrutemari		Date			
Typed or printed name				Registration N	No		
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	itiality is governed by 35 d application form to the ions for reducing this bu. Virginia 22313-1450. DC	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain o 1.14. This collection is e 7 depending upon the ind the Chief Information Offi COMPLETED FORMS	retain a benefit by obstimated to take 12 ividual case. Any cocer, U.S. Patent and FO THIS ADDRESS	the public which is to file (a minutes to complete, includ omments on the amount of Trademark Office, U.S. De S. SEND TO: Commissione	nd by the USPTO to process) ing gathering, preparing, and time you require to complete partment of Commerce, P.O. r for Patents, P.O. Box 1450,	

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/586,153	07/31/2007	Takeo Hosomi	Q96021 5617		
23373 75	90 09/30/2009		EXAMINER		
SUGHRUE MIO	N, PLLC	CERULLO,	JEREMY S		
	ANIA AVENUE, N.W	ART UNIT	PAPER NUMBER		
SUITE 800 WASHINGTON, I	OC 20037		2111 DATE MAILED: 09/30/200	9	

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 183 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 183 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
Notice of Allowability	10/586,153 <b>Examiner</b>	HOSOMI ET AL.  Art Unit			
,					
	Jeremy S. Cerullo	2111			
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commits GHTS. This application is:	n this application. If not included unication will be mailed in due cours			
1. 🔀 This communication is responsive to the amendment filed of	<u>on 26 June 2009</u> .				
2. ☑ The allowed claim(s) is/are <u>15-26</u> .					
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>		or (f).			
2. Certified copies of the priority documents have	been received in Application	on No			
3. Copies of the certified copies of the priority do	cuments have been receive	d in this national stage application fr	om the		
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirer	nents		
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			E OF		
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.				
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Revie	w ( PTO-948) attached			
1) ☐ hereto or 2) ☐ to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
ldentifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t			) of		
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT			he		
Attachment(s)	5 □ Nation of In	formed Datant Application			
1. Notice of References Cited (PTO-892)		formal Patent Application			
<ol> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statements (PTO/SB/08),</li> </ol>	Paper No.	ummary (PTO-413), /Mail Date Amendment/Comment			
Paper No./Mail Date			_		
<ol> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>		Statement of Reasons for Allowand	e		
11.0.01	9. Other	_·			
/J. S. C./ Examiner, Art Unit 2111	/MARK RINE				
	Supervisory Pa	tent Examiner, Art Unit 2111			

Application/Control Number: 10/586,153 Page 2

Art Unit: 2111

### **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance:

2. Claim 15 is considered to be in condition for allowance, particularly due to the limitations of the last two sections of the claim, wherein the at least one controller checks that all permission messages associated with requests that preceded the request associated with the current permission message have been received so that it can then issue an update message to the resource node (the resource node can then change the state of the target resource to the free state). The rest of the limitations of the claim deal with a network of resource nodes and control nodes, wherein the control nodes issue requests to access resources held with in the resource nodes, said resources being maintained in a locked or free state. Such a system of resource locking and access exists in the prior art, particularly in U.S. Patent No. 4,435,766, U.S. Patent No. 5,551,046, U.S. Patent No. 5,673,399, U.S. Patent No. 5,694,556, U.S. Patent No. 6,138,192, U.S. Patent No. 6,182,186, U.S. Patent No. 6,353,869, U.S. Patent No. 7,174,406, and U.S. Patent No. 7,380,247. However prior art teaching that a controller waits until all previous requests have been granted before a target resource is released has not been found to exist. Therefore, the limitations discussed above when taken in consideration with the rest of the claim in its entirety distinguish the invention from the prior art.

Application/Control Number: 10/586,153 Page 3

Art Unit: 2111

3. Claims 16-21 are considered to be in condition for allowance based on their dependence on Claim 15.

- 4. Claim 22 is considered to be in condition for allowance, particularly due to the limitations of the last two sections of the claim, wherein the at least one controller checks that all permission messages associated with requests that preceded the request associated with the current permission message have been received so that it can then issue an update message to the resource node (the resource node can then change the state of the target resource to the free state). The rest of the limitations of the claim deal with a network of resource nodes and control nodes, wherein the control nodes issue requests to access resources held with in the resource nodes, said resources being maintained in a locked or free state. Such a method of resource locking and access exists in the prior art, particularly in U.S. Patent No. 4,435,766, U.S. Patent No. 5,551,046, U.S. Patent No. 5,673,399, U.S. Patent No. 5,694,556, U.S. Patent No. 6,138,192, U.S. Patent No. 6,182,186, U.S. Patent No. 6,353,869, U.S. Patent No. 7,174,406, and U.S. Patent No. 7,380,247. However prior art teaching that a controller waits until all previous requests have been granted before a target resource is released has not been found to exist. Therefore, the limitations discussed above when taken in consideration with the rest of the claim in its entirety distinguish the invention from the prior art.
- Claims 23-26 are considered to be in condition for allowance based on their dependence on Claim 22.

Application/Control Number: 10/586,153 Page 4

Art Unit: 2111

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy S. Cerullo whose telephone number is (571)272-3634. The examiner can normally be reached on Tuesday - Friday, 8:00-4:00; Alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. C./ Examiner, Art Unit 2111

/MARK RINEHART/ Supervisory Patent Examiner, Art Unit 2111